Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	File Nos.
	)	482-DSE-MP/L-98
Williams Communications, Inc.	)	SES-MOD-19980121-00104
	)	SES-AMD-19980715-02115
Application for Modification of Earth Station License	)	Call Sign: E950202
W4 Communications Corp.	)	File Nos.
	)	SES-LIC-19990706-01136
Application to Operate a 4.8-meter Ku-band Fixed Earth Station for the Provision of Digital Data, Audio, and Video Services via ALSAT and Nahuel C Satellites	)	SES-AMD-19991108-01991
	)	Call Sign: E990298

ORDER

Adopted: March 23, 2000 Released: March 24, 2000

By the Chief, Satellite and Radiocommunication Division, International Bureau:

I. INTRODUCTION

1. In this Order, we authorize Williams Communications, Inc. (Williams)[1] and W4 Communications Corp. (W4) to access an Argentine satellite using earth stations in the United States. This satellite, Nahuel C,[2] will be used to provide a variety of fixed-satellite services to U.S. customers. These actions represent another step in implementing U.S. market-opening commitments to satellites licensed by other countries. These decisions should stimulate competition in the U.S. Fixed-Satellite Services market, providing consumers more alternatives in choosing communications providers and services. Increased competition may also lead to reduced prices for those services and further technological innovation.

II. BACKGROUND

[1] Williams filed its original modification application under the name of its wholly-owned subsidiary, Vyvx, Inc., but filed subsequent revisions to its application under its own name. We refer to this applicant as "Williams" throughout this Order.

[2] This satellite is also referred to as "Nahuel 1A." For purposes of this Order, we refer to this satellite as Nahuel C.

2. In the *DISCO II Order*,[3] the Commission implemented the satellite services market-opening commitments made by the United States in the World Trade Organization Agreement on Basic Telecommunications Services (WTO Basic Telecom Agreement). It also established a framework under which it would consider access by foreign satellite service operators not covered by the WTO Telecom Agreement. These market access commitments would allow new entrants and technologies into the U.S. market, thus advancing the growth of satellite services in the United States and around the globe. To implement its commitments, the Commission, among other things, established a procedure by which a service provider in the United States could request immediate access to a foreign in-orbit satellite that would serve the U.S. market.[4] This procedure requires a U.S. earth station operator seeking to communicate with a non-U.S. satellite to file an earth station application for an initial license or for a modification of its existing earth station license, listing the foreign satellite as a permitted point of communication.[5]

3. Because the Commission does not issue duplicative U.S. licenses for space stations licensed by another administration,[6] a U.S. earth station application often represents the Commission's first opportunity to evaluate whether the foreign space station complies with the Commission's technical, legal, and financial qualification requirements. The first earth station application seeking to communicate with a particular foreign satellite must therefore include the same detailed information about the space station and its operations that the Commission requires from U.S. space station applicants.[7] Financial information is not required if the satellite has already been launched, however, nor is technical information required if the satellite has completed international coordination with the United States.[8]

4. Williams and W4 seek authority to provide Fixed-Satellite Service in the "extended" Ku-band[9]

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[3] Amendment of the Commission's Regulatory Policies To Allow Non-U.S.-Licensed Space Stations To Provide Domestic and International Satellite Service in the United States, Report and Order, IB Docket No. 96-111, 12 FCC Rcd 24094 (1997) (*DISCO II* or *DISCO II Order*).

[4] *DISCO II*, 12 FCC Rcd at 24174 (para. 186).

[5] When an earth station has been granted authority to communicate with a specific satellite or group of satellites, those satellites are referred to in the earth station license as "points of communication."

[6] *DISCO II*, 12 FCC Rcd at 24174 (para. 188).

[7] All earth station applications must be accompanied by an exhibit containing the information required by Section 25.114 of the Commission's rules, 47 C.F.R. § 25.114, with respect to the proposed non-U.S. satellite. *DISCO II*, 12 FCC Rcd at 24175 (para. 189); 47 C.F.R. § 25.137(b). Section 25.137(b) refers to Section 25.114, which sets forth information requirements for U.S. space station operators.

[8] *DISCO II*, 12 FCC Rcd at 24175-76 (para. 191); 47 C.F.R. § 25.137(b).

[9] The "conventional" Ku-band is 11.7-12.2 GHz and 14.0-14.5 GHz. This band is allocated to the fixed-satellite service on a primary basis. *See* 47 C.F.R. § 2.106. The "extended" Ku-band is 11.45-11.7 GHz and 13.75-14.0 GHz. The 13.75-14.0 GHz band is shared between the fixed-satellite service and the government radiolocation service on a co-primary basis. *Id.* Williams originally requested authority to communicate in the conventional Ku-band, but subsequently amended its application to substitute the extended Ku-band. *See* Letter

throughout the Western Hemisphere using the Nahuel C satellite located at 72° W.L. Nahuel C is operated by an Argentine company called "Nahuelsat." On September 30, 1999, Williams was granted special temporary authority (STA) to communicate in the extended Ku-band with Nahuel C, until March 30, 2000.[10] Williams seeks regular authority to communicate with Nahuel C in these frequencies. W4 requests authority to operate a new transmit-only earth station, and to communicate with Nahuel C, three Mexican satellites, and all U.S.-licensed satellites.[11] W4 plans to transmit to Nahuel C in the extended Ku-band, at 13810.00 MHz to 13993.56 MHz, and with U.S.-licensed satellites in the conventional Ku-band, at 14.0 GHz to 14.5 GHz. W4 does not request authority to use any downlink frequencies in the United States. Both applications are unopposed.[12]

III. DISCUSSION

A. Space Station Analysis

1. General Framework

5. In the *DISCO II Order*, the Commission set forth the public interest analysis applicable in evaluating applications to use non-U.S. licensed space stations to provide satellite service in the United States. This analysis considers the effect on competition in the United States,[13] spectrum availability,[14] eligibility and operating (*e.g.*, technical) requirements,[15] and national security, law enforcement, foreign

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from Benjamin J. Griffin, Counsel for Williams Communications, Inc., to Sylvia Lam, International Bureau (dated Mar. 13, 2000) (*March 13 Letter*).

[10] In Williams's and W4's initial applications, the applicants claimed that Nahuel C is located at 71.8° W.L. Later, Williams corrected its application to state that Nahuel C is located at 72° W.L. Letter from Benjamin J. Griffin, Counsel for Williams Communications, Inc., to Sylvia Lam, International Bureau, Federal Communications Commission (Sept. 30, 1999). We authorize Williams and W4 to communicate with Nahuel C with the understanding that the satellite is located at 72° W.L. as specified in the Argentina-United States coordination agreement of March 1996.

[11] We do not address any issues raised by W4's communications with the three Mexican satellites at this time. We will instead address these issues in the context of a pending request to place these three satellites on the "Permitted Space Station List." *See DISCO II First Reconsideration Order* at paras. 6, 16-20.

[12] Loral Space and Communications, Inc. (Loral) filed comments in response to W4's application on January 28, 2000, expressing concerns regarding a Loral application at that time pending in Argentina. On February 25, 2000, Loral submitted a letter explaining that the Argentina administration is addressing its concerns regarding its application. Accordingly, we need not address Loral's concerns here. Letter from John P. Stern, Associate General Counsel, to Thomas S. Tycz, Chief, Satellite and Radiocommunication Division (dated Feb. 25, 2000).

[13] *DISCO II*, 12 FCC Rcd at 24107-56 (paras. 30-145).

[14] *DISCO II*, 12 FCC Rcd at 24157-59 (paras. 146-50).

[15] *DISCO II*, 12 FCC Rcd at 24159-69 (paras. 151-74).

policy, and trade concerns.[16] We evaluate Williams's and W4's requests to communicate with Nahuel C under this framework.

2. Competition Considerations

6. In *DISCO II*, the Commission established a rebuttable presumption in favor of entry by non-U.S. satellites licensed by World Trade Organization (WTO) Members to provide services covered by the U.S. commitments under the WTO Agreement on Basic Telecommunications Services (WTO Basic Telecom Agreement).[17] This means that we will presume that WTO-member licensed satellites providing WTO-covered services satisfy the competition component of the public interest analysis. The presumption in favor of entry also applies to satellite operators licensed by a foreign country with which the United States has an existing bilateral agreement to open each other's markets to the types of satellite services to be provided.[18] The Commission concluded that the market access commitments made under the WTO Basic Telecom Agreement or bilateral agreements with the United States will help ensure the presence and advancement of competition in the satellite services market and yield the benefits of a competitive marketplace to consumers in the United States and other countries.[19]

7. Argentina and the United States have reached a bilateral agreement that allows Argentine satellites to offer fixed-satellite services in the United States, including Direct-to-Home (DTH) service, Direct Broadcast Satellite (DBS) service, and Digital Audio Radio Service (DARS), after those satellites have been coordinated with the United States for these services.[20] Accordingly, we conclude that permitting Williams and W4 to access Nahuel C for purposes of offering fixed-satellite services, including DTH, will enhance competition for these services.

3. Spectrum Availability

8. In *DISCO II*, the Commission determined that, given the scarcity of orbit and spectrum resources, it would consider spectrum availability as a factor in determining whether to allow a foreign

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[16] *DISCO II*, 12 FCC Rcd at 24169-72 (paras. 175-82).

[17] *DISCO II*, 12 FCC Rcd at 24112 (para. 39). The United States' satellite service commitments cover fixed-satellite services, excluding direct-to-home service and mobile satellite services. The United States did not make WTO market access commitments for the Direct Broadcasting Satellite Service (DBS), and Digital Audio Radio Service (DARS).

[18] *DISCO II*, 12 FCC Rcd at 24157 (para. 143).

[19] *DISCO II*, 12 FCC Rcd at 24112 (para. 39); 24157 (para. 143).

[20] Agreement Between the Government of the United States of America and the Government of the Argentine Republic Concerning the Provision of Satellite Signals and the Transmission and Reception of Signals to and from Satellites For the Provision of Satellite Services to Users in the United States of America and the Argentine Republic, June 5, 1998, U.S.-Arg., Temp. State Dep't No. 98-107. *See also* International Bureau Announces Conclusion of U.S.-Argentina Framework Agreement and Protocol for Direct-to-Home Satellite Services and Fixed-Satellite Services, Public Notice, 13 FCC Rcd 16581 (1998).

satellite to serve the United States.[21] This is consistent with the Chairman's Note to the WTO Basic Telecom Agreement, which states that WTO Members may exercise their domestic spectrum/frequency management policies when considering foreign entry.

9. Allowing Nahuel C to serve the United States from the 72° W.L. orbit location will neither affect operations of any U.S.-licensed satellites nor contravene the Commission's spectrum/frequency management policies, provided that Nahuel C is limited to the extended Ku-band. In March 1996, Argentina and the United States entered into a coordination agreement, which allows Nahuel C to serve North America from the 72° W.L. orbit location, but only in the *extended* Ku-band. Later, in August 1998, this coordination agreement was expanded to allow an U.S. satellite operator to serve North America from the 72° W.L. orbit location, but only in the conventional C- and Ku-bands.[22] Pursuant to the August 1998 agreement, we licensed GE American Communications, Inc. (GE Americom) to operate a satellite at 72° W.L., but only in the conventional C and Ku-bands.[23] Consequently, allowing Nahuel C to serve the United States from the 72° W.L. orbit location in the extended Ku-band will not affect the operations of any U.S.-licensed satellites.

4. Eligibility Requirements

10. The Commission's *DISCO II Order* requires that space station operators not licensed by the Commission meet the same legal, financial, and technical qualifications required of U.S.-licensed space station operators. Nothing in the record raises concerns about Nahuelsat's legal qualifications to provide satellite services in the United States. Further, we need not examine Nahuelsat's financial qualifications to construct and launch satellites, because Nahuel C is already in orbit.

11. We must, however, review Nahuelsat's technical qualifications. The Commission's satellite licensing policy is predicated upon two-degree orbital spacing between geostationary satellites.[24] This policy permits the maximum use of the geostationary satellite orbit.[25] Applicants must demonstrate that they comply with the Commission's technical requirements, designed to permit two-degree orbital

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[21] *DISCO II*, 12 FCC Rcd at 24159 (para. 150).

[22] Commission Reaches Agreement with Argentina on Use of Geostationary Orbital Locations for the Provision for Fixed Satellite Services Between Countries, Public Notice, 1998 WL 461469 (F.C.C.) (released Aug. 10, 1998).

[23] *See* Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service, Memorandum Opinion and Order, 13 FCC Rcd 23684 (Int'l Bur. 1998).

[24] For more information regarding the Commission's two-degree spacing policy, see Licensing Space Stations in the Domestic Fixed-Satellite Service, 48 F.R. 40233 (Sept. 6, 1983).

[25] Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service, 11 FCC Rcd 13788, 13790 (para. 6) (1996). Prior to the Commission's adoption of the two-degree spacing policy, satellites in the geostationary satellite orbit were usually spaced three or four degrees apart. By adopting rules that enabled satellite operators to place their space stations two degrees apart, the Commission was able to accommodate more geostationary satellites.

spacing, to be authorized to provide service in the United States. The Commission may license satellites that are not two-degree compliant (or earth stations seeking to access such), but only when the applicants can demonstrate that their operations will not cause harmful interference to existing two-degree compliant satellite operations. Further, non-conforming operations are authorized conditioned upon a licensee accommodating future satellite networks serving the United States that are two-degree compliant.[26]

12. Argentina and the United States have completed coordination for the Nahuel C satellite. Accordingly, Nahuelsat is not required to submit technical information for Nahuel C.[27] Based on the information exchanged with Argentina during the coordination, we can determine that Nahuel C will not cause harmful interference to U.S.-licensed satellites if it operates in the extended Ku-band. Absent the more detailed technical information required by Section 25.114 of the Commission's rules,[28] however, we cannot determine whether these satellites can operate interference-free in a two-degree spacing environment.

13. Consequently, in the future, should the Commission authorize access to the U.S. market by a satellite that is two-degree-compliant, and is located within two degrees of the Nahuel C, Nahuelsat would be expected to coordinate in good faith with the licensee of that satellite. If a coordination agreement is not reached, the operation of U.S. earth stations communicating with Nahuel C that are not two-degree-compliant must be on a non-interference basis relative to U.S. services provided by the compliant satellite.

14. Finally, Williams and W4 plan to communicate with Nahuel C in the 13.75-14.0 GHz portion of the Ku-band, which is allocated domestically and internationally to the fixed-satellite service (FSS) subject to certain restrictions. In particular, footnotes S5.502, S5.503 and S5.503A to the International Telecommunication Union (ITU) Radio Regulations place certain restrictions on FSS operations.[29] Domestically, footnote US337 to 47 C.F.R. § 2.106 requires that earth stations operating in the 13.75-13.8 GHz band be coordinated through the National Telecommunications and Information Administration (NTIA) Interdepartment Radio Advisory Committee's Frequency Assignment Subcommittee to minimize interference to the forward space-to-space link of the National Aeronautics and Space Administration's

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[26] *See*, *e.g.*, Systematics General Corporation, Order and Authorization, 2 FCC Rcd 7550, 7550-51 (para. 9) (Com. Car. Bur. 1987); *New Skies Order*, 14 FCC Rcd at 13038 (para. 78).

[27] *DISCO II*, 12 FCC Rcd at 24176 (para. 191) (U.S. earth station operators are not required to submit technical information with respect to non-U.S. satellites for which international coordination has been completed).

[28] 47 C.F.R. § 25.114.

[29] In particular, footnote S5.502 to the international Radio Regulations restricts on the minimum e.i.r.p. and minimum antenna size for earth stations operating in this band. Footnote S5.503 limits FSS earth station e.i.r.p. spectral density in the 13.772-13.778 GHz band until certain space stations in the space research service operating in this band reach their end-of-lives. Footnote S5.503A states that: "…[W]hen planning earth stations in the fixed-satellite service to be brought into service between 1 January 2000 and 1 January 2001, in order to accommodate the needs of spaceborne precipitation radars in the band 13.793-13.805 GHz, advantage should be taken of the consultation process and the information given in Recommendation ITU-R SA.1071."

Tracking and Data Relay Satellite System. Accordingly, we require all communications with Nahuel C in the 13.75-14.0 GHz band to be consistent with these various international and domestic footnotes. The Commission and NTIA have established a procedure for reviewing non-government parties' requests to communicate in the 13.75-14.0 GHz band. Pursuant to this procedure, NTIA has concurred with Williams's and W4's use of frequencies in this band.

5. Other Issues

15. As described above, under *DISCO II*, national security, law enforcement, foreign policy, and trade concerns are included in the public interest analysis.[30] Nothing in the record before us raises any such concerns.

B. Earth Station Analysis

16. We now turn to the Williams and W4 earth station applications. Williams seeks to communicate with Nahuel C with a 6.1-meter antenna.[31] The only modification that Williams proposes for this antenna is to add Nahuel C as an authorized point of communication. It requests no other technical changes to the earth station. NTIA has concurred with W4's use of frequencies in the 13.75-14.0 GHz band. Consequently, we add Nahuel C to William's license as an authorized point of communication.

17. W4 requests authority to operate a new transmit-only earth station in San Diego, California, using a 4.8-meter antenna to communicate with all U.S.-licensed satellites only in the 14.0-14.5 GHz frequency band, and to communicate with Nahuel C in the 13810.00-13993.56 MHz frequency band.[32] W4 plans to carry Internet traffic and provide digital network communications and services to remote earth stations located throughout the Americas. W4's antenna complies with all the requirements of Part 25, including Section 25.209, and so we grant W4 authority to access all U.S.-licensed satellites (ALSAT) in the 14.0-14.5 GHz frequency band. In addition, NTIA has concurred with W4's use of frequencies in the 13.75-14.0 GHz band. Consequently, we add Nahuel C as an authorized point of communication in the 13810.00-13993.56 MHz frequency band.

IV. CONCLUSION

18. We have determined that Williams's communications with Nahuel C, and W4's communications with Nahuel C and all U.S.-licensed satellites, as conditioned, will be consistent with the

[30] *DISCO II*, 12 FCC Rcd at 24170-72 (paras. 178-82).

[31] Williams's earth station has both a 6.1-meter antenna and a 9-meter antenna. Williams seeks authority to communicate with Nahuel C only with its 6.1-meter antenna. *March 13 Letter*. Williams also seeks authority to replace its 9-meter antenna with an 8.2-meter antenna. We will address this request separately.

[32] W4 clarified that it seeks transmit-only authority in a letter dated February 29, 2000. *See* Letter from J. Walter Johnson, Counsel for W4 Communications Corp., to Sylvia Lam, International Bureau (dated Feb. 29, 2000).

Commission's policies regarding U.S. access to space stations licensed by foreign administrations. We therefore grant the earth station applications to the extent indicated in this Order.

V. ORDERING CLAUSES

19. Accordingly, IT IS ORDERED that, pursuant to Section 309(a) of the Communications Act, as amended, 47 U.S.C. § 309(a), and Sections 0.51 and 0.261 of the Commission's Rules, 47 C.F.R. §§ 0.51, 0.261, Williams Communications, Inc. IS GRANTED authority to modify its transmit/receive earth station at Perris, California, Call Sign E950202, as specified in Application No. SES-MOD-19980121-00104 as revised, to the extent specified in this Order, subject to the conditions set forth in this Order.

20. IT IS FURTHER ORDERED that, pursuant to Section 309(a) of the Communications Act, as amended, 47 U.S.C. § 309(a), and Sections 0.51 and 0.261 of the Commission's Rules, 47 C.F.R. §§ 0.51, 0.261, W4 Communications Corporation IS GRANTED authority to operate one transmit-only earth station at San Diego, California, Call Sign E990298 as specified in Application No. SES-LIC-19990706-01136 as revised, to communicate with all U.S.-licensed satellites in the 14.0 to 14.5 GHz frequency band, and Nahuel C in the 13810.00-13993.56 MHz frequency band, subject to the conditions set forth in this Order.

21. IT IS FURTHER ORDERED that consideration of W4 Communications Corporation's request for access to the Solidaridad 1, Solidaridad 2, and SatMex 5 satellite networks, and Williams Communications, Inc.'s request to replace its 9-meter antenna, SHALL BE DEFERRED to future proceedings.

22. IT IS FURTHER ORDERED that access to Nahuel C SHALL BE in compliance with the satellite coordination agreements reached between the United States and Argentina regarding the operations of Nahuel C.

23. IT IS FURTHER ORDERED that access to the Nahuel C satellite in the 13.75-14.00 GHz band shall be in accordance with footnotes S5.503A, S5.502 and S5.503 to the ITU Radio Regulations.

24. IT IS FURTHER ORDERED that Williams Communications, Inc., is authorized to communicate with Nahuel C only in the 11.45-11.7 GHz and 13.75-14.0 GHz frequency bands.

25. IT IS FURTHER ORDERED that transmissions between Williams Communications, Inc., and Nahuel C in the 13.75-14.0 GHz band shall be limited to the frequencies concurred with by the National Telecommunications and Information Administration's Interdepartment Radio Advisory Committee's Frequency Assignment Subcommittee to minimize interference to the forward space-to-space link of the National Aeronautics and Space Administration's Tracking and Data Relay Satellite System.

26. IT IS FURTHER ORDERED that W4 Communications Corporation is authorized to communicate with Nahuel C only in the 13810.00-13993.56 MHz frequency bands.

27. IT IS FURTHER ORDERED that transmissions between W4 Communications Corporation and Nahuel C in the 13.75-14.0 GHz band shall be limited to the frequencies concurred with by the

National Telecommunications and Information Administration's Interdepartment Radio Advisory Committee's Frequency Assignment Subcommittee to minimize interference to the forward space-to-space link of the National Aeronautics and Space Administration's Tracking and Data Relay Satellite System.

28. IT IS FURTHER ORDERED that operations over the Nahuel C satellite network shall not cause harmful interference to, nor shall operators accessing this satellite network claim protection from, U.S. services provided by U.S.-authorized satellite networks that are compliant with the Commission's two-degree spacing rules.

29. IT IS FURTHER ORDERED that operations over the Nahuel C satellite network that are not two-degree compliant shall not cause harmful interference to, nor shall operators accessing this satellite network claim protection from, U.S.-authorized services provided over non-U.S.-authorized satellite networks that are compliant with the Commission's two-degree spacing rules.

30. IT IS FURTHER ORDERED that operations over and access to the Nahuel C satellite network shall cease immediately upon notification of harmful interference. Williams Communications, Inc., and W4 Communications Corporation SHALL FORWARD all complaints of radio interference caused by their communications with the Nahuel C satellite to the Commission in writing.

31. IT IS FURTHER ORDERED that this Order is issued pursuant to Section 0.261 of the Commission's rules on delegations of authority, 47 C.F.R. § 0.261. This Order SHALL BE EFFECTIVE upon adoption. Petitions for reconsideration under Section 1.106 or applications for review under Section 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106 and 1.115, may be filed within 30 days of public notice of the release of this Order.

FEDERAL COMMUNICATIONS COMMISSION

Thomas S. Tycz
Chief, Satellite and Radiocommunication Division
International Bureau